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MEMORANDUM

DATE: October 22, 2007

TO: Rose Longoria, Yakama Nation Fisheries Department

FROM: Sheila Fleming, P.E., RIDOLFI Inc.

SUBJECT: **Comments on the Remedial Investigation / Feasibility Study Work Plan for the Harbor Oil Site dated September 2007**

Ridolfi has reviewed the above referenced document and prepared the following comments and requests for clarification. In general, the planned Phase 1 remedial investigation (RI) field investigation activities and the proposed Phase 2 sampling, if needed, should be adequate to characterize the site. Note that several of the comments apply to text that appears in more than one section of the document.

Comments and Requests for Clarification

1. **Page 4, Section 2.2 and other sections throughout the text.** What is the current condition of the soil berm? Does it appear intact or erosional? Is it effective at preventing surface water migration directly into the wetlands adjacent to the site? What are the current dimensions of the berm (height and width)?

2. **Page 40, Section 3.2.1; Section 4.5.1; and Table 36.** In addition to the potential on-site source areas identified, the areas listed below appear to be potential source areas based on previous investigations. Currently, these areas are not specifically targeted for sampling in Phase 1.

    - The containment area for Tanks 25 through 31. Figure 3 of the CEC report in Appendix G indicates detections of PCBs and TPH near Tank 27 and where the pipe chase connects to the containment area.
    - Areas that were trenched for utilities for the card lock fueling area. Figure 3 of the CEC report in Appendix G indicates detections of PCBs and TPH in the soil excavated from the utility trenches.
    - The former water treatment system (Building 5) to the west of the Tank Farm and Used Oil Processing Area.

3. **Page 45, Section 3.3.** SVOCs should be added to the bulleted list of COPCs.

4. **General comment.** Due to the 1979 fire and the wide variety of off-spec materials accepted at the facility, has EPA considered requiring dioxin/furan analyses?

5. **Page 70, Section 4.5.1.** The term "depth composite" is used to describe the method for sampling the berm and stockpile; however, the sampling interval(s) targeted for these composites is not defined in the QAPP. Please clarify.

6. **Page 70.** Approximately how many cubic yards of soil are in the stockpile?

7. **Page 70, last paragraph.** Please clarify if the four "shallow" soil samples to be collected in the north drainage ditch are to be grabs or composites? Is it known if the fill placed in the former drainage ditch can be differentiated from the native soil that is targeted for sampling?

8. **Page 71.** Insufficient information is provided regarding the stormwater collection system to evaluate whether the proposed sampling is adequate. What is the location of the underground piping from the catch basins to the treatment system? When was it installed? What is the condition and integrity of the stormwater collection and conveyance system? What sampling is the facility required to do under their NPDES permit. Do they sample influent as well as effluent prior to discharge to the wetland? Has the facility had any violations or unpermitted discharges from their treatment system?

9. **Page 72, Tank Farm and Oil Reprocessing Area.** Are there visible signs of failure in the containment system, particularly in areas where sheen is observed when the water table rises?

10. **Appendix B, page 43, Section 3.2.3.1.** Please clarify the objective of field screening and confirm that the field screening is not being conducted in lieu of laboratory analysis. Are there additional samples that may be collected based on field screening results?

11. **Appendix B, page 44, Surface Soil Sampling, third sentence.** How will field screening be used to determine appropriate sampling intervals, particularly for metals, PCB, SVOC and PAH analyses?

12. **Appendix B, page 72, Table 3-14.** Due to the likelihood of encountering free-product at the site and the potential for cross contamination, rinsate blanks should be targeted to sampling tools used at locations with obvious contamination (e.g., NAPL) to confirm the effectiveness of the field decontamination procedures.

13. **Appendix B, page 46.** For soil berm and stockpiles samples, clarify the depth of the hang auger samples and whether there will be discrete grabs at multiple depths or a single composite.

14. **Appendix B, general comment.** For soil sampling, it would be helpful to have a table that summarizes each sample location, sampling interval, sample type (e.g., grab or composite), sampling method or equipment (e.g., trowel, hand auger, geoprobe, hollow-

stem auger, etc.), laboratory analysis, and field screening analysis. Generally, this information would be included in a SAP, but since the SAP and QAPP are combined for this project, this information is not presented in a single table.

15. **Appendix B, page 61, Section 3.2.6.** How will drill cuttings that cannot be returned to a sampling location be characterized for disposal?

16. **Appendix B, page 68, Section 3.4.2.3.** Will groundwater samples be field-filtered for dissolved metals analyses?

17. **Appendix B, page 76.** How many rounds of groundwater sampling are proposed as part of Phase 1? The document implies a single round of groundwater sampling which will likely be inadequate to fully characterize groundwater at the site.

18. **Appendix B, page 78, Section 3.9.2.** Although field duplicate sample data will be averaged for mapping purposes, please confirm that all sample data (primary and duplicate) will be reported in the RI Report.

19. **Appendix B, page 80, Section 3.9.5.** For completeness, also measure and report 2,4'-DDD, 2,4'-DDE and 2,4'-DDT.

20. **Appendix G, Figure 3.** Sample numbers HC-01, HC-04 and HC-05 are each assigned to two separate locations. How did the VG reconcile this inconsistency in their interpretation of this data set and in Figure 10 of the Work Plan?